

# Sidebar

**Sidebar** This document outlines the specifications for the Sidebar Component, a React component designed to provide a customizable sidebar for web applications.

**Behavior Description**

- The Sidebar Component should include a logo at the top and a clickable icon/button positioned towards the top right for expanding and collapsing the sidebar.
- When collapsing the sidebar, only the icons of sidebar items should be displayed. Each item within the sidebar should consist of an icon and a text label with appropriate padding.
- Clicking on any item should activate it, highlighting it to indicate its active state.

Additionally, each SidebarItem Component may contain children. In these instances, the parent SidebarItem should feature a dropdown icon at its far right. Clicking on a SidebarItem with children should expand the sidebar, revealing its child items. Collapsing the sidebar should only reveal the icons of sidebar items.

**Inputs**

- Props**
- logo** : The logo to display at the top of the sidebar.
- children** : The Sidebar component should accept SidebarItem components as its children.
- onItemClick** : A callback function triggered when an item in the sidebar is clicked. It should accept a parameter to receive the clicked item's data.
- onCollapseToggle** : A callback function triggered when the collapse/expand button is clicked.
- ToggleIcon** : The logo to display at the top left of the sidebar, serving as a toggle for collapsing and expanding the sidebar.

**Details on Inputs**

- logo Type:** ReactNode (e.g., JSX, HTML element)
- Required:** Yes
- Description:** The logo to display at the top of the sidebar.

- children (SidebarItem) Type:** ReactNode
- Required:** Yes
- Description:** The Sidebar component accepts SidebarItem components as its children.

- onItemClick Type:** Function
- Required:** Yes
- Parameters:** label (string): The label of the clicked sidebar item.
- Description:** A callback function that receives the label of the clicked sidebar item when an item in the sidebar is clicked.

- onCollapseToggle Type:** Function
- Required:** Yes
- Description:** A callback function triggered when the collapse/expand button is clicked.

- ToggleIcon Type:** ReactNode (e.g., JSX, HTML element)
- Required:** Yes
- Description:** The logo to display at the top left of the sidebar. It serves as a toggle for collapsing and expanding the sidebar. When clicked, it triggers the onCollapseToggle callback function.

**SidebarItem Component**

- Props**
- Icon** : Icon to display when Sidebar is collapsed.
- label** : The text to display for the sidebar item.
- link** : The URL or route path to navigate to when the item is clicked.
- active** : Boolean indicating whether the item is currently active or not.
- children (Optional)**: Child SidebarItems for creating nested items.

```
< Sidebar logo = { < img
```

src = " logo.png " alt = " Logo " /> } onItemClick = { handleItemClick } onCollapseToggle = { handleCollapseToggle } > < SidebarItem label = " Home " link = " / " active = { true } /> < SidebarItem label = " Profile " link = " /profile " > < SidebarItem label = " Settings " link = " /profile/settings " /> </ SidebarItem > < SidebarItem label = " Settings " link = " /settings " /> </ Sidebar > Conclusion ■ With the provided documentation, you should now be able to create and integrate the Sidebar component along with SidebarItem child components into your TypeScript-based React applications effectively.

```
<Sidebar
  logo={}
  onItemClick={handleItemClick}
  onCollapseToggle={handleCollapseToggle}
>
  <SidebarItem label="Home" link="/" active={true} />
  <SidebarItem label="Profile" link="/profile">
    <SidebarItem label="Settings" link="/profile/settings" />
  </SidebarItem>
  <SidebarItem label="Settings" link="/settings" />
</Sidebar>
```